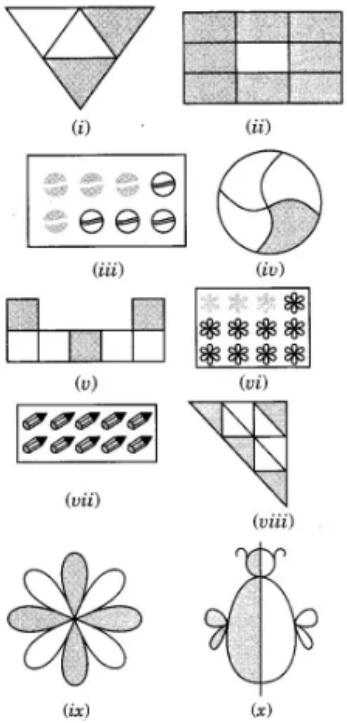
Board – CBSE	Class – 6th	Topic – Fractions Ex:7.1

Exercise – 7.1

Q1. Write the fraction representing the shaded portion



Sol. (i) Total number of parts = 4

Number of shaded parts = 2

∴ Fraction = $\frac{2}{4}$

(ii) Total number of parts = 9

Number of shaded parts = 8

∴ Fraction = $\frac{8}{9}$

(iii) Total number of parts = 8

Number of shaded parts = 4

∴ Fraction = $\frac{4}{8}$

(iv) Total number of parts = 4

Number of shaded parts = 1

∴ Fraction = $\frac{1}{4}$

(v) Total number of parts = 7

Number of shaded parts = 3

∴ Fraction = $\frac{3}{7}$

(vi) Total number of parts = 12

Number of shaded parts = 3

∴ Fraction = $\frac{3}{12}$

(vii) Total number of parts = 10

Number of shaded parts = 10

∴ Fraction = $\frac{10}{10}$

(viii) Total number of parts = 9

Number of shaded parts = 4

∴ Fraction = $\frac{4}{9}$

(ix) Total number of parts = 8

Number of shaded parts = 4

∴ Fraction = $\frac{4}{8}$

(x) Total number of parts = 2

Number of shaded part = 1

∴ Fraction = $\frac{1}{2}$

(ix) Total number of parts = 8

Number of shaded parts = 4

∴ Fraction = $\frac{4}{8}$

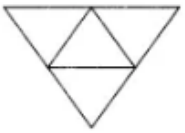
(x) Total number of parts = 2

Number of shaded part = 1

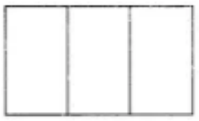
∴ Fraction = $\frac{1}{2}$

Q2. Color the part according to the given fraction.

(i) $\frac{1}{6}$

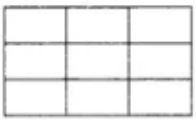


(ii) $\frac{1}{4}$



(iii) $\frac{1}{3}$

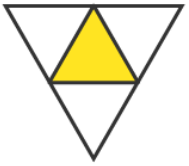
(iv) $\frac{3}{4}$



(v) $\frac{4}{9}$

Sol.

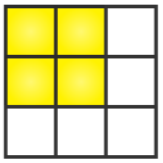
(i) $\frac{1}{6}$



(ii) $\frac{1}{4}$

(iii) $\frac{1}{3}$

(iv) $\frac{3}{4}$



(v) $\frac{4}{9}$

Q3. Identify the error, if any.

This is $\frac{1}{2}$

This is $\frac{1}{4}$

This is $\frac{3}{4}$

Sol. (a) Since the shaded part is not half.

∴ This is not $\frac{1}{2}$.

(b) Since, the parts are not equal.

∴ The shaded part is not $\frac{1}{4}$.

(c) Since, the parts are not equal. ∴ The shaded part is not ¾.

Q4. What fraction of a day is 8 hours?

Sol. Since a day has 24 hours and we have 8 hours,

$\therefore Required\ fraction\ = \frac{8}{24}$

Q5. What fraction of an hour is 40 minutes?

Sol. Since I hours = 60 minutes

$\therefore Fraction\ of\ 40\ minutes\ = \frac{40}{60}$

Q6. Arya, Abhimanyu, and Vivek shared lunch. Arya has brought two sandwiches, one made of vegetables and one of Jam. The other two boys forgot to bring their lunch. Arya agreed to share his sandwiches so that each person will an equal share of each sandwich.

(a) How can Arya divide his sandwiches so that each person has an equal share?

(b) What part of a sandwich will each boy receive?

Sol. (a) Arya has divided his sandwich into three equal parts.

So, each of them will get one part.

$(b) Each\ one\ of\ them\ will\ receive\ \frac{1}{3} part. \therefore Required\ fraction\ = \frac{1}{3}$

Q7. Kanchan dyes dresses. She has to dye 30 dresses. She has so far finished 20 dresses.

What fraction of dresses has she finished?

Sol. Total number of dresses to be dyed = 30

Number of dresses finished = 20

$\therefore Required\ fraction\ = \frac{20}{30} = \frac{2}{3}$

Q8. Write the natural numbers from 2 to 12. What fraction of them are prime numbers?

Sol. Natural numbers between 2 and 12 are;

2,3,4, 5, 6, 7, 8, 9, 10,11, 12

Number of given natural numbers = 11

Number of prime numbers = 5

$\therefore Required\ fraction\ = \frac{5}{11}$

Q9. Write the natural numbers from 102 to 113. What fraction of them are prime numbers?

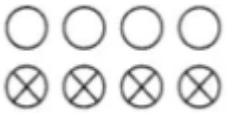
Sol. Natural numbers from 102 to 113 are;

102,103,104,105,106, 107,108, 109,110, 111, 112,113

Total number of given natural numbers = 12

Prime numbers are 103, 107, 109, 113
∴ Number of prime numbers = 4
∴ $Required\ fraction = \frac{4}{12} = \frac{1}{3}$

Q10. What fraction of these circles have X's in them?



Sol. Total number of circles = 8
Number of circles having X's in them = 4
$Required\ fraction = \frac{4}{8} = \frac{1}{2}$

Q11. Kristin received a CD player for her birthday. She bought 3 CDs and received 5 others as gifts.

What fraction of her total CDs did she buy and what fraction did she receive as gifts?

Sol. Number of CDs bought by her from the market = 3
Number of CD's received as gifts = 5
∴ Total number of CDs = 3 + 5 = 8
∴ $Fraction\ of\ CD\ (bought) = \frac{3}{8} and\ the\ fraction\ of\ CDs\ (gifted) = \frac{5}{8}$